

101.8 - Low Alloy Steels (disk and rod forms)

Steel and iron SRMs described here are furnished in various forms (disk, rod and chips) for optical emission and X-ray fluorescence spectrometric methods and for other methods of chemical analysis.

See also [Table 101-1](#) and [Table 101-5](#).

Nominal Sizes for Solid Steel SRMs:

600 Series: 3.2 mm diameter and 51 mm long.

1100 and 1200 Series: 31 mm diameter and 19 mm thick.

1700 Series: 34mm diameter and 19 mm thick.

A "C" preceding the SRM number indicates a chill cast sample; 31 mm diameter and 19 mm thick.

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PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM	662	663	665	1134	1135	1218	1224	1225	1226	1227	1228	1254	1262b	1264a	1265a	1269	1270	1271	1286
Description					LA Steel, High Silicon	LA Steel, High Silicon	LA Steel, Carbon (AISI 1078)	LA Steel (AISI 4130)	LA Steel	LA Steel, Basic Open Hearth, 1% C	LA Steel, 0.1% C	LA Steel (Ca only)	LA Steel (AISI 94B17)	LA Steel, High Carbon (mod.)	Electrolytic Iron	Line Pipe (AISI 1526 mod.)	LA Steel, Cr-Mo (A336) (F-22)	LA Steel (HSLA-100)	Low Alloy Steel (HY 80)
Unit of Issue	(rods)	(5 rods)	(5 rods)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	
C	0.163	0.57	0.008	0.026	0.027	0.0029	0.75	0.274	0.085	0.97	0.072	Ca 0.0053	0.160	0.871	0.0067	0.298	0.077	0.064	0.196
Mn	1.05	1.50	0.0057	0.277	0.094	0.014	0.41	0.48	0.274	0.402	0.365	1.05	0.258	0.0057	1.35	0.626	0.73	0.152	
P	0.044	0.029	0.0025	0.028	0.006	(0.002)	0.009	0.007	0.0022	0.014	0.004	0.044	0.010	0.0011	0.012	0.0065	0.005	0.008	
S	0.037	0.0055	0.0059	0.009	0.026	0.0011	0.039	0.014	0.0044	0.026	0.018	0.037	0.025	0.0055	0.0061	0.0065	0.0013	0.017	
Si	0.4	0.74	0.0080	2.89	3.19	(3.2)	0.173	0.221	0.231	0.215	0.007	0.40	0.066	0.0080	0.189	0.247	0.334	0.130	
As	0.092	0.010	(0.0002)									0.096	0.052	(0.0002)	(0.006)	(0.02)		0.019	
Sn	0.016	(0.095)		0.003	0.004				(0.003)			0.016	(0.008)		(0.039)	(0.02)		0.012	
Al (total)	0.095	0.024	(0.0007)	0.329	0.0028	0.005	0.060		0.054	(0.028)	0.061	0.081	(0.0080)	(0.0007)	0.016	(0.005)	0.020	0.109	
B	0.0025	0.0009	0.00013									0.0025	(0.011)	0.00013	(	(0.0033)	(0.006)	
Pb	0.0043	0.0022	0.000015					(0.0001)				0.0004	0.024	0.000015	0.005	(0.0016)	(0.0002)		
Ag	(0.0010)	(0.0038)										0.0011	(0.000002)		(0.0002)	(0.0001)			
Ge	[0.002]	[0.010]										[0.002]	[0.003]						
O	(0.0011)	(0.0007)										(0.0011)	(0.0010)						
N	(0.0041)	(0.0041)										(0.0040)	(0.0032)						
SRM	662	663	665	1134	1135	1218	1224	1225	1226	1227	1228	1254	1262b	1264a	1265a	1269	1270	1271	1286
Description					LA Steel, High Silicon	LA Steel, High Silicon	LA Steel, Carbon (AISI 1078)	LA Steel (AISI 4130)	LA Steel	LA Steel, Basic Open Hearth, 1% C	LA Steel, 0.1% C	LA Steel (Ca only)	LA Steel (AISI 94B17)	LA Steel, High Carbon (mod.)	Electrolytic Iron	Line Pipe (AISI 1526 mod.)	LA Steel, Cr-Mo (A336) (F-22)	LA Steel (HSLA-100)	Low Alloy Steel (HY 80)
Unit of Issue	(rods)	(5 rods)	(5 rods)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	
H	[[((
Nb	0.30	0.049						(0.005)				0.30	0.157				0.025	(0.012)	
Se	[0.001]	[0.0001]										(0.0012)	(0.00021)						
Ta	0.21	(0.053)										0.20	0.11						
Zr	0.20	0.050		(0.002)				(0.010)	(0.0006)			0.22	0.069					(0.021)	
Cu	0.51	0.098	0.0058	0.070	0.056	0.003	0.072		0.125	0.006	0.012	0.51	0.250	0.0058	0.095	0.114	1.48	0.043	
Ni	0.60	0.32	0.041	0.038	0.050	(0.002)	0.054	0.018	5.42	0.007	0.018	0.59	0.142	0.041	0.108	0.174	3.34	2.81	
Cr	0.30	1.31	0.0072	0.019	0.022	0.006	0.071	0.91	0.467	0.019	0.016	0.30	0.066	0.0072	0.201	2.34	0.552	1.53	
V	0.041	0.31	0.0006		(	0.002	0.004	0.0018	0.002			0.041	0.106	0.0006	0.004	0.013	0.003	0.0057
Mo	0.070	0.30	0.0050	0.008	0.014	(0.003)	0.013	0.166	0.446	0.003	0.009	0.070	0.49	0.0050	0.036	0.956	0.543	0.334	
W	0.21	0.046					(0.005)					0.020	0.102		(0.001)	(0.003)	(0.13)		
Co	0.30	0.048	0.0070		(0.002)			0.029	(0.0008)			0.57	0.15	0.0070	(0.014)	0.038		0.116	
Ti	0.084	0.050	0.0006		(0.004)			0.0021				0.100	0.24	(0.0001)	(0.009)	(0.003)		0.040	
Au	(0.0005										(0.00005)	0.0001						
Ce	(0.0011)	(0.0016)										0.0019	0.00022						

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Unit of Issue	(rods)	(5 rods)	(5 rods)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	(disk)	
H	[[((
Nb	0.30	0.049						(0.005)				0.30	0.157				0.025	(0.012)	
Se	[0.001]	[0.0001]										(0.0012)	(0.00021)						
Ta	0.21	(0.053)										0.20	0.11						
Zr	0.20	0.050		(0.002)				(0.010)	(0.0006)			0.22	0.069					(0.021)	
Cu	0.51	0.098	0.0058	0.070	0.056	0.003	0.072		0.125	0.006	0.012	0.51	0.250	0.0058	0.095	0.114	1.48	0.043	
Ni	0.60	0.32	0.041	0.038	0.050	(0.002)	0.054	0.018	5.42	0.007	0.018	0.59	0.142	0.041	0.108	0.174	3.34	2.81	
Cr	0.30	1.31	0.0072	0.019	0.022	0.006	0.071	0.91	0.467	0.019	0.016	0.30	0.066	0.0072	0.201	2.34	0.552	1.53	
V	0.041	0.31	0.0006		(0.002	0.004	0.0018	0.002			0.041	0.106	0.0006	0.004	0.013	0.003	0.0057	
Mo	0.070	0.30	0.0050	0.008	0.014	(0.003)	0.013	0.166	0.446	0.003	0.009	0.070	0.49	0.0050	0.036	0.956	0.543	0.334	
W	0.21	0.046					(0.005)					0.020	0.102		(0.001)	(0.003)	(0.13)		
Co	0.30	0.048	0.0070		(0.002)			0.029	(0.0008)			0.57	0.15	0.0070	(0.014)	0.038		0.116	
Ti	0.084	0.050	0.0006		(0.004)			0.0021				0.100	0.24	(0.0001)	(0.009)	(0.003)		0.040	
Au	(0.0005										(0.00005)	0.0001						
Ce	(0.0011)	(0.0016)										0.0019	0.00022						

Values in parentheses are given for information only.

Values in brackets are approximate values from heat analysis and are given for information only.

*Values is in mg/kg.

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Unit of Issue	(rods)	(5 rods)	(5 rods)	(disk)	(disk)												
Hf	[0.006]	[0.0015]														(0.0003)	(0.0013)
La	0.0004	0.0006														(0.0004)	0.00007
Nd	(0.0005)	(0.0007)														0.0006	0.00007
Pr	(0.00012)	(0.00018)														(0.00012)	(0.00003)
Fe	(95.3)	(94.4)	99.9													(95.3)	(96.7)
Sb	0.012	0.002														0.012	0.034
Bi	(0.002)	(0.0008)														(0.002)	(0.0009)
Ca	(0.0002)	(														(0.0001)	0.00004
Mg	(0.0006)	(0.0005)														0.0006	0.00015
Te	(0.0005)	(0.0022)														(0.001)	0.00018
Zn	(0.0005)	(0.0004)															[0.001]

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(disk)



(95.0)

0.0052



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